

CLAIMS

1. A method of identifying a ligand of a bacterial sigma⁷⁰ subunit which comprises contacting the sigma⁷⁰ subunit or a portion thereof comprising the anti-sigma binding region, with a test compound and a fusion protein of an anti-sigma⁷⁰ factor of bacteriophage T₄, and determining whether the test compound binds competitively with the anti-sigma⁷⁰ factor to the sigma⁷⁰ subunit or portion thereof.
2. A method according to claim 1, which comprises:
 - (i) immobilizing the sigma⁷⁰ subunit or portion thereof on a matrix or solid support;
 - (ii) adding the test compound and the fusion protein;
 - (iii) adding a first antibody against the fusion protein;
 - (iv) adding a labeled second antibody against the first antibody; and
 - (v) determining the amount of second antibody bound to the (first antibody - fusion protein - sigma⁷⁰ subunit or portion thereof) complex formed on the matrix or solid support.
3. A method according to claim 1 or claim 2, wherein the sigma⁷⁰ subunit or portion thereof is obtained from *Escherichia coli* or *Salmonella typhimurium*.
4. A method according to any one of the preceding claims, wherein the anti-sigma⁷⁰ factor has an amino acid sequence as shown in SEQ ID NO: 1 or SEQ ID NO: 2.
5. A method according to any one of the preceding claims, wherein the fusion protein also comprises glutathione-S-transferase.

6. A method according to any one of the preceding claims wherein the ligand is an inhibitor of a bacterial sigma⁷⁰ subunit.